UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: JUL 13 1992

SUBJECT: Ft. Sheridan Remedial Investigation (RI), West Deerfield Twsp., IL

FROM: Charles G. Hall, Environmental Engineer (AT-18J)
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This memo responds to your request for comments on the subject document.

Mechanical Notes:
Page 4-83, Section 4.2.5.1, under Organochlorine Pesticides and PCBs: As written in the RI, 2,2-bis(p-chlorophenyl)-1,1-dichloroethane has an extra "1" in it, and "p-chlorophenol" should be "4-chlorophenyl". The compound name which was written is incorrect for the pesticide commonly known as DDT. This error was also noted on pages 4-81 and 4-103. Please correct the spelling in these two places and verify that it was not made in other places as well.

Page 4-92, Section 4.2.5.4, under Semi-Volatile Organic Compounds, 2nd paragraph: The colon in the first sentence is used incorrectly. Please rewrite it as follows: "The remaining SVOCs [2-methylnaphthalene, bis(2-ethylhexyl)phthalate, dibenzofuran and diethyl phthalate] were detected ....

Page 4-103, Section 4.2.6.2, 2nd paragraph: 2,4-dichlorophenoxyacetic acid is usually abbreviated 2,4-D. Further, the use of abbreviations for pesticides is frequently duplicative or misleading. For example, on page 4-83, 2,2-bis(4-chlorophenyl)-1,1,1-trichloroethane is abbreviated to DDT, but it is abbreviated to PPDDT on page 4-103. Considering that there is a pesticide on the Target Compound List called 4,4'-DDT, it is possible that the author intends to write that there are two DDT isomers that were detected at the site. However, the same compound name was used on pages 4-83 and 4-103. Please determine what isomer is intended; use the correct name for each; and abbreviate each isomer uniquely (DDT and 4,4'-DDT would be appropriate and distinct). Also, "2,2-bis(p-chlorophenol)-1,1-dichloroethene" was probably intended to be "1,1-bis(4-chlorophenyl)-2,2-dichloroethane", which is commonly known as DDD. If "dichloroethene" was intended, it could be the pesticide commonly known as DDE.

Page 4-132, Section 4.3.5.4, under Water Quality: Trichloroethylene is the same compound as trichloroethene, but the latter is the preferred

nomenclature. The "yl" should be dropped from 1,2-dichloroethylenes for the same reason and list only one.

Page 4-142, Section 4.4.1, paragraph 1, 3rd sentence: Replace the semicolon with a colon.

Page 4-143, Section 4.4.1.1, 2nd paragraph, 2nd sentence: What title of the Code of Federal Regulations?

Page 4-147, Section 4.4.3.3: Please correct the chemical names to the following: vinyl chloride; 1,1,1-trichloroethane; 1,2-dibromoethane (or should it be dibromomethane?).

Page 7-4, Section 7.3: Please state the order of preference for obtaining toxicity data and what source was used if a compound was listed in the Integrated Risk Information System (IRIS). IRIS is the Environmental Protection Agency's (EPA) preferred source of toxicity data.

Substantive Notes:
Page 4-8, Section 4.1.1.6: The operational problems with the landfill gas vents that were reported indicate that an active landfill gas collection system is needed to control volatile organic compound (VOC) emissions from landfill 7. On May 31, 1991, the EPA proposed a new source performance standard (NSPS) for municipal solid waste landfills. Section III.B of the proposal explains that the emission guidelines may affect the remedial actions at Superfund sites, and consequently, the standards in the final rule may be an applicable or relevant and appropriate requirement (ARAR) at landfill sites. In general, as proposed, the NSPS would require that landfill gas collection systems (active or passive) be installed at new landfills and those that received MSW after December 1987 which emitted more than 150 megagrams per year (167 tons per year) of nonmethane organic contaminants (NMOCS). A control device that is capable of reducing NMOCs in the collected gas by 98 weight percent must also be installed.

The descriptions of the contents of the 7 landfills on site indicate that only landfill 7 may require control of VOC emissions. Unfortunately, the volume of landfill 7 was not reported, so a preliminary estimate of annual NMOC emissions to the air could not be made. If this information becomes available, the equation for estimating NMOC emissions is included in the proposed rule.

Page 4-141, Section 4.4, general: Thank you for using a sampling method that is appropriate for VOC monitoring. Useful information is generate in air sampling plans such as this one. Unfortunately, the air pathway analysis at most RIs employ a portable flame ionization detector or photoionization detector, and such surveys are completely inadequate for an useful air pathway analysis.

Page 4-141, Section 4.4, 1st paragraph and page 9-9, Section 9.1.1.9, 1st paragraph: Section 4.4 states that air samples were analyzed for 10 organic compounds, but Section 9.1.1.0 states that 12 organic compounds were identified. Were additional compounds identified in the samples, and if so,

why were they not included in dispersion modeling? Furthermore, how were these 10, or 12, VOCs selected?

Page 4-142, Section 4.4: Where, when, and by whom were maximum allowed ground level concentrations (MAGLCs) proposed?

Page 4-143, Section 4.4.1.1: How was Method 1 modified? The modification that is reported is that only one access port was used instead of two. If the gas vents are less than 12" in diameter, Method 1A should have been used instead of Method 1. In light of the low flow in the vent, it appears that a minimanometer should have been used to measure the flow rate. If the measured flow rates are too low, the calculated emission rates for dispersion modelling would also be low.

Page 6-39, Section 6.2.3, under Soil to Air Pathway: Thank you for recognizing that VOCs that are spilled on the ground not only sink into the ground because of their densities but also evaporate up into the air because of their vapor pressures.

If you have any questions regarding these comments, please feel free to contact me at 6-9401.

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